

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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SECURITY INFORMATION

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COUNTRY USSR/East Zone of Germany

SUBJECT 1. Electronics at NII 11, Gorkiy,
and at OSW
2. Living Conditions in the USSR

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25 YEAR RE-REVIEW

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ELECTRONICS

N. I. I. 11 GORKI (USSR)

1.  Laboratory No. 2 at N. I. I. 11 under Dr. HASSELBECK

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(i) Field Strength Meter

Range - 80-400 Mc/s.

Type of input - Pulse or CW

Band-width - 2 Mc/s.

S/N - 7 KTo

(ii) Field Strength Meter

Range - 20-100 Mc/s.

Type of input - Pulse or CW

It was stipulated that the sensitivity was to be as high as possible. The valves used in the field strength meters were manufactured in SVETLANA and were types 2 C40 (now designated TM 1) and LD 1. The band-widths of both (i) and (ii) had to be great enough to deal with a $1/\mu$ s pulse. A peak voltage meter in the output provided satisfactory indication under various conditions of attenuator adjustment. It was specified that the equipment should be capable of working in close proximity to a pulse transmitter. The direct pulse was intended to block the meter receiver and to clear the receiver in time to measure the reflected pulse. The blocking arrangement could be switched off so that CW measurements in the range 2μ V/m - 100 mV/m could be taken.

2. Parallel to the above work, ZIGANKE and FLOER worked in a neighbouring laboratory on development of a signal generator for the range 80-400 Mc/s. The output was said to be $1/\mu$ v - 100 mV into 75 Ohms. Dr. HASSELBECK at this time, together with Ing. K. OERTEL, developed a signal generator of 80-400 Mc/s frequency range, but adapted for external pulse modulation.

3. N. I. I. 11 is located in the MUSA suburb of GORKI. The Institute covered an area of approximately 80 x 30 m and had three stories, with a flat roof. The building was erected in 1920, and is centrally heated, although the rooms at the end of the heating ducts are heated by stoves. Detailed layout of the building is not included in this report.

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4. LENIN, ZAVOD

Situated on the railway ARZAMAS-GORKI, about 500 m north east of PRUNSE This is purely a production plant. Germans were employed

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5. FRUNSE, ZAVOD (Opposite LENIN Works)

HERZOG worked here, clearing production difficulties. Prototypes from N. I. I. 11 were taken to the FRUNSE ZAVOD for series production. They generally started up with batches of 100.

OSW

6. [redacted] SOVIET orders for the development of the following:-

- (i) Field strength measuring receiver for 1.25 Mc/s (CW) sensitivity 1 μ V/m with frame.
- (ii) Field strength measuring receiver for 20-100 Mc/s (CW) sensitivity 1 μ V/m with frame and with dipole aerial.

[redacted] In June 1952 a Soviet order for the development of a field strength measuring receiver 80-450 Mc/s (pulse) was received. This was completed in December 1952. Completely conventional techniques were employed in these tasks.

7. [redacted] laboratory was given the task of developing the following field strength measuring gear for the Soviets:-

- (i) 370 Mc/s - 1500 Mc/s (CW)
- (ii) 1500 Mc/s - 10,000 Mc/s (pulse)

8. In May 1952 the ASTRO-PHYSICAL INSTITUTE, POTSDAM, placed an order for GALACTIC noise measuring set in the band 160-200 Mc/s.

[redacted] SACHSENWERK, RADEBERG is developing a 50 cm receiver for POTSDAM ASTRO-PHYSICAL INSTITUTE, and also that the HEINRICH HERTZ INSTITUTE is working on a 80 cm receiver for them. Dr. Kurt MIE of POTSDAM does the liaison work with the OSW, HEINRICH HERTZ INSTITUTE and RADEBERG. He is said to have a Dipl. Ing. SCHNEEWOLF of the TECHNICAL HIGH SCHOOL, DRESDEN as his collaborator.

9. [redacted] a transmitter is being developed at OSW for the band .8-100 Mc/s, giving 200 Watts and wobbled over an unknown band.

10. Miscellaneous OSW News

- (i) Dr. BINGEL, who had been working on germanium detectors and transistors, was dismissed in November 1952. [redacted] HELMWIG has taken over but is much hampered by lack of germanium. He is making germanium detectors for RADEBERG.
- (ii) Dr. NEIDHARDT (DRAGON Returnee from MONINO) gave in December 1952 four illustrated lectures in the Works on "The Glories of the SOVIET UNION." No one attended.
- (iii) Gerhard MEGLA of SACHSENWERK, RADEBERG, visits OSW frequently and is said to be very active politically.

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SCIENTIFIC ORDER OF BATTLE

PERSONALITIES (Russian) - N.I.I. 11.

Director SKIBARKA	Head of the Institute in FRUNSE until about 1948.
Cert. Eng. DOLYKHEV	Head of the UHF Laboratory for receivers, transmitters and accessories.
Cert. Eng. GEMEDEV	Head of Laboratory for receivers, UHF field strength measurements etc.
Designer RASADIN	In charge of designing
MALITSCHEV	Engineer and organisor. He was the man competent for the German specialists.
SUYEV	Head of personnel.
Director GURSHKOV	Successor to SKIBARKA
Director PETROV	Was the man responsible for food, accommodation and transport in KARPOVKA.
IVANOV	Medical officer in MUSU.
BYELAYEV	Trade Union functionary? Came from Ministry in MOSCOW.
KURLATSCHEV	Laboratory manager.

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PERSONALITIES (German) - N.I.I. 11

Dr. HASSELBECK

Dr. Otto BAIER (went 1948/49 to GORNI)

Dr. WEIZENMÜLLER

Dr. RHODE

Dr. SPLEONTHA

Dr. BAUER

Dipl. Ing. ZIGANKE

Dipl. Ing. FLOER

" " KOLOKMAR

" " FEYERT

Ing. HERZOG

" OERTEL, Kurt

" PREISSNER (Moved 1946 to MOSCOW)

" RIEDEL

" MARKS

" TAEGE

" BUNSEMER

" BRADE

Designer OERTEL, Wilhelm

" BÖHM

" KRÜGER

" STERNAGEL

" GUERT

" REIDT (KÖPENICK)

LENIN ZAVOD

Dr. HOLZMÜLLER

Dr. FAIFER

Dr. SCHLOEMILCH (Moved 1948 to MOSCOW)

Dr. HERRMANN

Dipl. Ing. WACHENHÜSEN

Ing. WERNER

Ing. BIERACK

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MISCELLANEOUSThe Standard of Living in the Soviet Union

In order to assess the standard of living in the Soviet Union correctly, the modest requirements of the Soviet people must be taken into account. One often finds that money is wasted on excessive indulgence in alcohol without any particular incentive, and at the same time that people "vegetate" in extremely poor circumstances. [] it is precisely the lowest-paid sections of the population who favour such short drinking bouts. It may be, of course, that those who are better situated hold their celebrations in a manner which [] could not observe.

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In general, two groups emerged clearly. These were the politically-employed party members, and those persons who do not belong to any organisation. The party or the trade union assists "politicians" in big and little positions right up to the time they receive old age pensions. [] camp in KARPOVKA is a good example of this. All auxiliary labour was organised, from the boilerman to the "nurse", who was entered on the list as "female stoker" and had no idea of sick-nursing. His wife tried to obtain a domestic help from the neighbouring village of GUKERINOV. She was "non-political". Director PETROV let her work, after much negotiation. [] she is only permitted to do "colchase" and roadmaking work. This category of villagers has no identity card. It is the lowest class, if one does not count pensioners and disabled persons.

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Monthly earnings may be regarded as an outward sign of evaluation:

1. There are people who earn far more than 10,000 roubles a month. Party leaders, scientists and artists, writers etc. with a party membership book form this class.

Doctors, such as those in municipal hospitals, earn little. Dr. ARCHIN, surgeon, received about 2000 roubles a month. He repeatedly emphasized that he was a patriot. He was not in the party.

2. Persons with an academic training receive 2000 - 10,000 roubles per month, according to their job. To this must be added the bonuses, which are not paid out to any apparent system. A laboratory worker could reckon with a monthly basic salary of 2,500 roubles.
3. Engineers and technicians earned between 600 roubles and 2,000 roubles. That was the basic salary, which was very seldom increased by bonuses.
4. Mechanics were already included in the lower groups. If they worked very quickly and skilfully they reached a monthly income of 1,500 roubles. Mechanics' earnings fluctuate between 250 and 800 roubles.
5. Unskilled workers, women on road-work etc. earned 100 - 300 roubles per month.
6. Pensioners and disabled persons from groups 4 and 5 must have recourse to part-time earnings, begging, black market trading etc.

The housing conditions are very bad. It can be said that there is one living room for each family. The space prescribed by the Government, namely 5 m² per person is by no means adhered to, e.g. 3 generations live in one room. This, though, applies to the lower categories. A reasonable allocation of accommodation commences at a monthly salary of about 2,000 roubles and more.

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New building cannot cover housing needs. Some people are building their own homes, i.e. one-family wooden houses. Bricks are practically unobtainable, for [redacted] "the brickmills have no clay".

Inheritance leads to particularly painful situations. The State decrees that an inheritance must be taken up. [redacted] inherited a house, a long way away from his place of work. No-one wanted to buy it from him, unless at a very cheap price. So he pulled the house down and drove it [redacted] into the town, in order to build it up again. Removals with furniture and household goods over long distances happen very seldom. One sells everything and travels with a suitcase to the new job.

Interior furnishing is very simple; a loudspeaker, rarely a radio receiver, a samovar and the indispensable [redacted] cooker are among the most important things. The [redacted] lamp must not be forgotten, even if electric light is available. Electric cookers etc. are not allowed. Efforts are made to distribute the load on the electricity works as evenly as possible with the current-consuming works in the area, by switching the supplies to blocks of houses on and off. Normally, there was current in the houses when the factories switched off, from about 1900 hours in the evening to 0600 hours in the morning. [redacted] not [redacted] any meters for checking electricity consumption, either in KOTOVO or in other villages. One pays a lump sum. Beds, cupboards, tables, etc. are in a more or less good condition. The dwellings [redacted] gave an impression of emptiness. Some of the furniture was old-fashioned. But [redacted] never [redacted] a badly kept home, even when goats and young pigs shared the living room during the winter months.

Town and country dwellers are provided with a full programme by the State. Mobile cinemas with many foreign films travel about, equipped with more or less good projection apparatus. About 40% of all films are Eastern products. With few exceptions these films are produced for educational purposes; 60% of all films, however, originate from abroad. Theatre shows and concerts are held in big towns every day. They are well attended. Youth is greatly attracted by sport and especially hunting. Bear hunts lasting up to 8 days were not uncommon. Children learn to fish before they go to school. [redacted] Even the Russian directors went fishing on Saturday, not returning before Sunday.

Medical care is very well organised. There are hospitals everywhere except in villages or very small towns. Hospitalisation is free of charge. The food is adequate. If, however, a worker has an illness of long duration he will suddenly (after 3 months) find himself without money. He receives the money to be paid by the trade union only after 5 - 6 months. The hospital equipments are clean, but there is often a lack of medicaments. They are usually bought on the black market by the patients. So long as coupon books and food cards were issued, supplies of textiles, shoes, soap and food were very bad. The worker received cards according to his grading in the factory.

There were 3 grades for clothing alone. Coupon books over 750 roubles were met in special shops. The holders seldom succeeded in getting the coupons honoured. The supply of goods was inadequate. The coupon books were simply bought up immediately, and the things not required were sold on the black market above the proper price. Those who worked during the day usually found when they had finished work that there were no goods to be had.

Things were similar with foodstuffs. Here, too, there were gradings. No shopping was done however, as Director PETROV was responsible for obtaining the food. The population was badly supplied.

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Coupon books and food cards were issued through the works only. Those who did not work, e.g. the members of their families, did not receive ration cards. Food for the family had to be bought in the "free" shops.

Larger purchases, suit, coat etc. are not taken into account.

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Rights and Obligations

The phrase "Every Soviet citizen has a right to work" is out of place. Anyone who does not work for the State finds it hard to live. All consumer goods, from cabbage to soap, were distributed by the works, at fairly reasonable prices, whether in kind or in the form of permits. Not until 1949 did the price levels start to become reasonable. Flour, however, seems still to be scarce. It was sold twice a year by the works, until December 1950. The supply of butter was worse in 1950 than in 1949. Nevertheless, it was possible to exert a certain pressure on the non-working population. Those who had no dwelling of their own, and they were many, had difficulty in finding accommodation. Each works had its own housing estate. New building was for the major part financed by the works. Those who did not work for the State did not get accommodation. Every worker was obliged to adhere strictly to the works' regulations. The works, on the other hand, did not fulfil the obligations laid down in the contract. There were in the first place the salaries. The dates of payment are fixed in the salary book. Wages and salaries were paid out up to 20 days late. No overtime was paid. If a mechanic or technician is unlucky in his work, he is obliged to repair the error at his own expense. His superior has to make the decision in each case.

The fight against slackers is a hobby of the Soviet supervisors. Anyone who arrives late at his work three times, without having an adequate excuse, is put into a punishment camp. In this case, too, the decision rests with the supervisor, mostly a party functionary. The traffic conditions were so bad in GORKI that a delay was usual. Directors and the higher employees were taken from their homes to the works in a works' car, so that they were seldom subjected to traffic delays.

Every worker must work wherever the undertaking sends him. Separation grants are not paid. This regulation hits building operatives, chauffeurs etc. particularly hard.

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Errors in planning have to be ironed out by the staff. Work often continues on the last Sunday of the month and instead the first workday of the following is free. This is done to assure fulfilment of the month's quota.

The potato operation starts in October every year. On a Sunday fixed by the town Soviet the staff goes out to the neighbouring "colchoses". The sudden order for the potato harvest is supposed to speed things up.

The average Soviet person has few rights. He may give notice, but the works may retain him as long as the worker is needed.

Every worker receives sufficient leave. Also it has often been found that workers have been sent away for convalescence.

A labour court represents the worker in complaints against the works. decisions are usually given in favour of the works. In the Soviet Union women are to be found in almost all occupations. What was disliked was the employment of women as building operatives. Women were to be found doing house-building as well as repair work on railways. They carried railway sleepers and dug foundations.

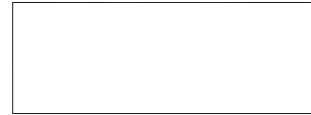
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There is seldom any family life as we know it. Usually, man and wife work in different undertakings. If there are children, the nursery furnished by the works replaces the parental home. Children from 8 weeks to school age are cared for there during the day, and from there they go to school later on. During the holidays, the schools go to a "pioneer" camp in a collective group. These camps are either organised by the school or the works take over the care of them.

Orphan children are housed in special homes. The boys mostly have pre-military training and provide officer recruits.



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The main transport route is the highroad. The waterways come second. The railways play a modest part.

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